

ABSTRACT OF THE DISCLOSURE

A method of analyzing prokaryotic gene expression is disclosed, which comprises a process for isolating an mRNA, a process for adding a polyA at the 3' end of the mRNA, a process for synthesizing a cDNA from the mRNA, a process for preparing a cDNA fragment having a sequence of a first adaptor at one end and a sequence of a second adaptor at the other end from the cDNA, a process for performing PCR with the cDNA fragment using a first primer having a sequence 5 complementary to the sequence of the first adaptor and a second primer 2 having a sequence complementary to the sequence of the second adaptor, a process for performing electrophoresis with amplified cDNA fragments, and a process for recovering a desired cDNA based on the result of 10 15 electrophoresis.

Drawings

[Fig. 1]

cDNA Fragment

[Fig. 2]

5 Addition of a PolyA tail

Synthesis of cDNA

Cleavage by means of type I restriction enzyme

Ligation of the sequence of Adaptor 1

Recovery of the PolyA tail side

10 Cleavage by means of type II restriction enzyme

Removal of the PolyA tail side

Ligation of the sequence of Adaptor 2

[Fig. 6]

Desired cDNA fragment

15 Amplification of the cDNA fragment by PCR

Size fractionation of the cDNA fragments by
electrophoresis on acrylamide gelCutting out the [Image] portion of the gel containing
the desired cDNA fragment20 The desired cDNA [Image] is eluted from [Image] and is
amplified again by PCR.

Amplified [Image] is ligated to plasmid vector [Image].

The established recombinant plasmid [Image] is
incorporated into E. coli.

25 [Fig. 8]

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Recovered Fragment